PATENT   **Docket No. RSW920030014US1**
                                                                        (356928.00017)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

INVENTORS:	**David A. Selby**	Confirmation No. **2671**
APPLICATION NO.	**10/674,188**	
FILED:	**September 29, 2003**	Examiner: **D. Lastra**
CASE NO.	**RSW920030014US1**	Group Art Unit: **3688**

TITLE: **INCENTIVE-BASED WEBSITE ARCHITECTURE**

FILED ELECTRONICALLY ON August 23, 2010

Commissioner for Patents
MAIL STOP APPEAL BRIEF-PATENTS
P.O. Box 1450
Alexandria, VA 22313-1450

Attention: Board of Patent Appeals and Interferences

<u>APPELLANTS' BRIEF</u>

This brief is in furtherance of the Notice of Appeal filed in this case on June 22,

2010. The Commissioner is authorized to charge the fee for filing of this Appeal Brief to

Deposit Account No. 09-0457.

1.   REAL PARTY IN INTEREST

The present application is assigned to International Business Machines

Corporation, having its principal place of business at New Orchard Road, Armonk, New York

10504. Accordingly, International Business Machines Corporation is the real party in interest.

2.   **RELATED APPEALS AND INTERFERENCES**

The appellant, assignee, and the legal representatives of both are unaware of any

other appeal or interference which will directly affect or be directly affected by or have a bearing

on the Board's decision in this appeal.

3.   **STATUS OF CLAIMS**

A.   Claims canceled: 1-8

B.   Claims withdrawn from consideration but not canceled: None

C.   Claims pending: 9-22

D.   Claims allowed: none

E.   Claims rejected: 9-22

F.   Claims appealed: 9-22

Appealed claims 9-22 as currently pending are attached as the Claims Appendix

hereto.

4.   **STATUS OF AMENDMENTS**

A Reply under 37 C.F.R. §1.111 was filed on July 8, 2008; claim amendments

were made. In response, the Examiner issued a non-final Office Action on September 9, 2008.

A Reply under 37 C.F.R. §1.112 was filed on December 9, 2008, and claim amendments were

made. In response, on April 3, 2009, the Examiner issued a final Office Action. A Reply under

37 C.F.R. §1.116 was filed on June 3, 2009; claim amendments were made, and a Notice of

Appeal was filed concurrently. A brief in support of the Notice of Appeal was filed on July 28,

2009. In response, prosecution of the application was reopened on October 7, 2009 with the

issuance of a non-final Office Action. A Reply under 37 C.F.R. §1.111 was filed on January 7,

2010; claim amendments were made.

In response, the Examiner issued the final Office Action being appealed herein.

Applicant filed a Notice of Appeal on June 22, 2010.

5.   SUMMARY OF THE CLAIMED SUBJECT MATTER

Claim 9: A system for influencing the actions of users of an interactive content-delivery

system, comprising: means for identifying probabilities of selection with respect to all

selections offered by said interactive content-delivery system, and designating certain of said

selections as low probability selections based on the identified probabilities (*page 5, lines 8-13;*

Fig. 1, steps 102 and 104; Fig. 3); and means for presenting users of said interactive content-

delivery system with incentives based upon said probabilities, whereby said low probability

selections receive higher-value incentives than selections having higher probability of selection

than said low probability selections (*page 5, line14 to page 6, line 8; Fig. 1, steps 106 and 108*).

(Means to perform the functions claimed in claim 9 are described at page 10, line 10 to page 11,

line 16.)

Claim 16: A computer program product for influencing the actions of users of an

interactive content-delivery system, comprising a computer-readable storage medium having

computer-readable program code embodied in the medium, the computer-readable program code

comprising: computer-readable program code that when executed on a processor identifies

probabilities of selection with respect to all selections offered by said interactive content-delivery

system, and designating certain of said selections as low probability selections based on the

identified probabilities (*page 5, lines 8-13; Fig. 1, steps 102 and 104; Fig. 3*); and computer-

readable program code that when executed on a processor presents users of said interactive

content-delivery system with incentives based upon said probabilities, whereby said low

probability selections receive higher-value incentives than selections having higher probability of

selection than said low probability selections (*page 5, line14 to page 6, line 8; Fig. 1, steps 106

and 108*).

The present invention applies gaming theory and well-understood sales processes and

techniques to allow the operator of an interactive sales medium to control what is displayed to a user

of the medium in a manner that signals their intentions (e.g., looking for a lower price, looking for a

particular incentive, etc.) so that the "strategies" being used by the consumer can be identified and

exploited. Specifically, the claimed invention identifies the probabilities of selection for all possible

selections on the website, and designates certain of the selections as low-probability selections. The

low-probability selections are then assigned higher-level incentives than those that are higher

probability selections.

6.   GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Applicant requests the Board to review the following rejection:

1.   Rejection of claims 9-13 and 16-20 under 35 U.S.C. §103(a) as being

unpatentable over U.S. Patent Application Publication No. 2002/0062245 to Niu in view of U.S.

Patent Application Publication No. 2001/0014868 to Herz.

2.   Rejection of claims 14-15 and 21-22 under 35 U.S.C. §103(a) as being

unpatentable over U.S. Patent Application Publication No. 2002/0062245 to Niu in view of U.S.

Patent Application Publication No. 2001/0014868 to Herz and further in view of U.S. Patent

Application Publication No. 2003/0028518 to Mankoff.

7.   ARGUMENT

<u>Claims 9-22 as a Group</u>

Applicant treats the two grounds of rejection as a group since both grounds of rejection

are directed to the same independent claims.

KSR (*KSR International Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 82 USPQ2d 1385 (2007)

requires that an Examiner provide "some articulated reasoning with some rationale underpinning

to support the legal conclusion of obviousness." Further, an Examiner must "identify a reason

that would have prompted a person of ordinary skill in the relevant field to combine the elements

in the way the claimed new invention does," In addition, the Examiner must make "explicit" this

rationale of "the apparent reason to combine the known elements in the fashion claimed,"

including a detailed explanation of "the effects of demands known to the design community or

present in the marketplace" and "the background knowledge possessed by a person having

ordinary skill in the art."

These requirements have not been met. As noted above, among other elements, the claimed

invention includes:

> ....means for identifying probabilities of selection with respect to *all selections offered* by said interactive content-delivery system.... (Independent claim 9) (emphasis added)

> ....computer-readable program code that when executed on a processor identifies probabilities of selection with respect to *all selections offere*d by said interactive content-delivery system.... (Independent claim 16) (emphasis added)

Contrary to the position taken by the Office, nowhere in Niu is there any discussion or

disclosure of going through *each selection possibility* on an interactive content-delivery system (i.e.,

each pathway available on a website) and identifying the probabilities of selection of *each selection*

possibility.

Applicant acknowledges that Niu looks at calculated probabilities that a user will (a) leave a

website or (b) make a purchase on the website, to decide whether or not to generate real-time

promotions to the user, and that Niu also uses the frequency of visits and time of visits by the user to

determine if a promotion should or should not be presented to the user (see paragraph [0043] of Niu).

This "leave or purchase" probability is based solely on keystroke data of the user and is not at all

based on analyzing probability for *all* possible *selections* as is claimed. While this may be helpful

and remotely similar to the concept claimed herein, there is in no way any teaching or suggestion of

"identifying probabilities of selection with respect to all selections offered by said interactive

content-delivery system" as is claimed herein. This claimed feature is neither taught nor suggested

by Niu, Herz, nor a combination of the two.

Further, as noted above, among other elements, the claimed invention includes:

....designating certain of said selections as low probability selections based on the identified probabilities.... (Independent claim 9)

....computer-readable program code that when executed on a processor.... designat[es] certain of said selections as low probability selections based on the identified probabilities.... (Independent claim 16)

As the Examiner admits, Niu does not teach the claimed aspect of "designating certain of said selections as low probability selections based on the identified probabilities" nor "whereby said low probability selections receive higher-value incentives than selections having higher probability of selection than said low probability selections". The Examiner asserts that Herz teaches that this is an "old and well known" concept.

Contrary to the position taken by the Office, nowhere in Herz is there any discussion or disclosure of designating certain of the selections as low probability selections, and then presenting higher incentives to users who purchase the lower-probability selections. First, as noted above, Herz also fails to supply the claimed identification of probabilities of selection with respect to *all selections* offered by the content delivery system, a feature also lacking in Niu. Herz does discuss probabilities with respect to certain *incentive offers* and with respect to certain shoppers. But the present invention, as claimed, focuses attention on probabilities of selection of <u>all available selections</u>, not on the incentive offers or shoppers. This fundamental and claimed approach is one of the primary novel aspects of the claimed invention and is nowhere taught or suggested in the prior art. Thus, further consideration of Herz is unnecessary. However, addressing the Examiner's statement characterizing Herz, Applicant submits that Herz also contains no teaching or suggestion of *designating* certain *selections* as low probability nor assigning higher incentives to low-probability selections. At best, the portion of Herz relied upon by the Examiner can be characterized as

teaching the providing of generous offers to incent any customer to purchase something, or to change purchasing patterns (e.g., buy economy size instead of regular size). Nowhere does Herz discuss analyzing the probability that a particular user will or will not make a particular selection (not to be confused with customized prices and promotions as in Herz) and then, based on that analysis, assign higher incentives to low-probability selections.

Regarding the Mankoff reference, Applicant submits that it neither teaches nor suggests the above-identified claim elements, and the Office has only relied on Mankoff for its alleged teaching of "negative incentives" as recited in the dependent claims.

For the above reasons, the present invention patentably defines over Niu, Herz, and a combination thereof; thus, claims 9-22 (i.e., the independent claims as well as the claims depending therefrom) are in condition for allowance.

8.   CONCLUSION

For the foregoing reasons applicants respectfully request this Board to overrule the Examiner's rejections and allow claims 9-22.

                              Respectfully submitted:

 August 23, 2010   /Mark D. Simpson/
Date   Mark D. Simpson, Reg. No. 32,942

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CLAIMS APPENDIX

CLAIMS INVOLVED IN THIS APPEAL:

Claims 1 to 8 (Cancelled)

9. (Previously presented) A system for influencing the actions of users of an interactive content-delivery system, comprising:

means for identifying probabilities of selection with respect to all selections offered by said interactive content-delivery system, and designating certain of said selections as low probability selections based on the identified probabilities; and

means for presenting users of said interactive content-delivery system with incentives based upon said probabilities, whereby said low probability selections receive higher-value incentives than selections having higher probability of selection than said low probability selections.

10. (Original) The system of claim 9, wherein said means for identifying includes at least:

means for estimating probabilities of selection for each possible selection offered by said interactive content delivery system if historical user data for said interactive content delivery system is unavailable.

11. (Original) The system of claim 10, wherein said means for identifying further comprises at least means for analyzing historical user data for said interactive content delivery system to identify probability of selection based on said historical user data.

12. (Original) The system of claim 11, wherein said means for analyzing historical user data comprises at least means for performing historical analysis of paths taken by users who have not been presented with incentives.

13. (Previously presented)   The system of claim 11, wherein said means for analyzing historical user data is continually updated with new historical user data obtained after users of said interactive content-delivery system have been presented with incentives.

14. (Original) The system of claim 11, wherein said incentives are selected based on gaming theory and include both positive and negative incentives.

15. (Original) The system of claim 14, wherein said interactive content-delivery system comprises a web-based e-commerce site.

16. (Previously presented) A computer program product for influencing the actions of users of an interactive content-delivery system, comprising a computer-readable storage medium having computer-readable program code embodied in the medium, the computer-readable program code comprising:

computer-readable program code that when executed on a processor identifies probabilities of selection with respect to all selections offered by said interactive content-delivery system, and designating certain of said selections as low probability selections based on the identified probabilities; and

computer-readable program code that when executed on a processor presents users of said interactive content-delivery system with incentives based upon said probabilities, whereby said low probability selections receive higher-value incentives than selections having higher probability of selection than said low probability selections.

17. (Original) The computer program product of claim 16, wherein said computer-readable program code that identifies probabilities of selection includes:

computer-readable program code that when executed on a processor estimates probabilities of selection for each possible selection offered by said interactive content delivery system if historical user data for said interactive content delivery system is unavailable.

18. (Original) The computer program product of claim 17, wherein said computer-readable program code that identifies probabilities of selection further comprises computer-readable program code that when executed on a processor analyzes historical user data for said interactive content delivery system to identify probability of selection based on said historical user data.

19. (Original) The computer program product of claim 18, wherein said computer-readable program code that analyzes historical user data comprises at least computer-readable program code that when executed on a processor performs historical analysis of paths taken by users who have not been presented with incentives.

20. (Previously presented)   The computer program product of claim 18, wherein said computer-readable program code that when executed on a processor analyzes historical user data is continually updated with new historical user data obtained after users of said interactive content-delivery system have been presented with incentives.

21. (Original) The computer program product of claim 18, wherein said incentives are selected based on gaming theory and include both positive and negative incentives.

22. (Original) The computer program product of claim 21, wherein said interactive content-delivery system comprises a web-based e-commerce site.

EVIDENCE APPENDIX

No additional evidence is presented.

RELATED PROCEEDINGS APPENDIX

No related proceedings are presented.